

CEER views on the Commission's Public Interventions Package: Delivering the internal electricity market and making the most of public intervention

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Introduction

The Council of European Energy Regulators (CEER) welcomes the European Commission's Package on public interventions in electricity markets published on 5 November 2013¹. The present document sets out the views of Europe's national regulatory authorities for energy (NRAs) regarding individual elements of the Package; namely, the guidance on generation adequacy, the guidance on the design of renewable support schemes and on the use of renewable energy cooperation mechanisms, and the Staff Working Document on incorporating demand side flexibility in electricity markets. We look forward to continuing dialogue with the European Commission and stakeholders on ways to promote and achieve competitive and sustainable energy markets in Europe to the benefit of consumers.

1 Guidance on generation adequacy in the internal electricity market

1.1 General remarks

One of the main objectives of market integration is the development of a single competitive market that delivers a sufficient level of security of supply. From a regulatory perspective, it is of utmost priority to address generation adequacy issues **in a coherent and systematic way**, taking into account all relevant impacts and dependencies. CEER therefore undertook work on capacity remuneration issues and published its thinking in early 2013².

Furthermore, CEER is currently finalising a report on "Assessment of generation adequacy in European countries," (due for publication early 2014) identifying current practices, which we intend to use towards establishing recommendations for a harmonised common framework on generation adequacy assessments at a European, or at least, regional level.

Acknowledging that under certain circumstances (e.g. creating a level playing field, overcoming market failures, promoting technological development and innovation, and providing adequate market-based investment signals) there can be a need for public intervention in the energy sector. CEER welcomes the general objective to define a coherent policy framework to **favour a more transparent and coordinated approach to generation adequacy** and to ensure that any public intervention in this regard is well designed and effective.

¹ [Guidance to Member States on state intervention in electricity markets](#), November 2013

² [CEER response to European Commission public consultation on generation adequacy, capacity mechanisms and the internal market in electricity](#), February 2013

1.2 Assessment of Generation Adequacy

Assessing generation adequacy is a complex task. CEER believes that adequacy outlooks are, however, **essential tools to envisage or drive investment and possible public interventions** in relation to generation adequacy. Whilst the latter is a responsibility for Member States, ensuring coherent analyses and exchanging results can be beneficial to deliver an increased insight into generation adequacy levels. It is of utmost importance to consider ways to **improve current and future generation adequacy and risk assessments at national, regional and European levels**; notably, to ensure more transparency and to address the need for flexible resources, taking into account the dynamic behaviour of variable generation but also the benefits of the internal electricity market (IEM) through interconnectors.

Together with on-going efforts undertaken in the Electricity Coordination Group, the European Commission guidance provides a set of interesting provisions in this respect: inclusion of Union policies, recognition of the cross-border dimension, inclusion of reliable data on wind and solar energy, the potential of demand response, as well as consultation with stakeholders. These provisions set up a relevant starting point which should be used for **further investigation and exchanges between parties to fully satisfy future system needs**.

CEER is currently taking stock of and analysing existing national practices on generation adequacy assessments and welcomes future discussion with relevant parties, including the European Commission, in order to establish best practices and a common base for assessment methodologies and data use across Member States.

1.3 Public intervention to ensure generation adequacy

CEER agrees that a **systematic and careful assessment of the benefits and impacts** should be elaborated when envisaging new market design policies to cope with current market inefficiencies. As suggested by the European Commission, such policies could be envisaged when significant distortions remain and an assessment suggests that alternative policies could solve the identified problem in an efficient and IEM-compatible manner. Moreover, best efforts should be made to ensure **rapid implementation of the European target models for electricity and gas markets**. This will enhance the IEM by stimulating an efficient cross-border use of current flexible generation facilities and increase incentives for new investments through day-ahead and intraday market coupling, cross-border balancing and remedial action and re-dispatch, flow-based capacity calculation, all on the basis of relevant bidding zones. In the meantime, CEER is of the opinion that additional efforts towards **removing existing barriers**, where possible, are essential for ensuring that energy markets can function properly.

1.4 Capacity remuneration mechanisms

Security of supply is a high priority area for Member States and NRAs. From all the different types of capacity remuneration mechanisms, CEER supports that **ideally the least distortive ones should be applied**, provided that they satisfy their intended objectives and are compatible with the IEM. In particular, we agree that **cross-border effects** should be thoroughly assessed in order to understand the wider consequences on the IEM.

In addition, it is important to note that the existing electricity systems can present different security of supply challenges, and that Member States and NRAs typically tailor policy considerations towards specific objectives to address these challenges. Such differences go some way to explaining the various reasons why capacity mechanisms are envisaged or being implemented. From a high level appraisal of these interventions, it can reasonably be claimed that **not all these measures have been designed to address an identical problem**. CEER therefore supports that the choice of instrument should be undertaken after an analysis that provides solid evidence that one capacity support instrument is more adequate than another to address identified adequacy gaps in one Member State or possibly at regional level.

With respect to the design features of capacity mechanisms, CEER shares the European Commission's concern that incompatible or poorly designed capacity measures may **risk distorting electricity trading, generation and investment decisions**. Coordination between neighbouring system operators, NRAs and Member States in defining the cross-border rules of such mechanisms would clearly **need to be considered and enhanced to ensure full compatibility of market arrangements** with the objectives pursued by the achievement of the IEM.

CEER agrees that the design of any capacity measure should, to a reasonable extent, follow some key principles, including at least: **technological neutrality, consistency with decarbonisation objectives, cross-border participation, no significant interference with cross-border energy markets and fair allocation of costs to consumers**. CEER broadly supports the high-level recommendations from the European Commission on these design features, but would also welcome the opportunity to **further discuss their implications** and look deeper into the underlying features of the proposed framework. Taking cross-border participation in capacity mechanisms as an example, CEER is concerned about the practical implications of the proposed methodology in section 6.3 of the guidance for allocating funds related to implicit benefits from electricity imports. If the price signals are not set in the right way, and the actors relieving the generation adequacy problem are not directly remunerated, it may distort investment incentives for interconnectors and hamper the integration of the IEM. Since further development of cross-border infrastructure is of major importance for reaching a fully integrated IEM, this topic may require additional investigation.

CEER would be happy to cooperate further with the European Commission and all relevant stakeholders in the follow-up work to this guidance, in order to contribute to the **full realisation of the benefits of an integrated and competitive IEM**.

2 Guidance for the design of renewables support schemes and on the use of renewable energy cooperation mechanisms

CEER welcomes the European Commission's guidance for the design of renewables support schemes and the use of renewable energy cooperation mechanisms. One of the aims of the EU Climate and Energy Package is to reach a 20% share of renewable energy in EU energy consumption by 2020 in a cost-effective and economically efficient manner. Support schemes for renewable energy sources (RES) are widely used to help achieve this goal, but very often – *in the case of poor design and implementation*³ – they create room for inefficient use of the provided funds and/or lead to market distortions where they do not adjust to the falling cost of renewables. This guidance could be a first step to improving such inefficient RES support structures.

Rising shares of renewable electricity which are de facto separated from the market by virtue of widely applied non-market-based support schemes decrease the size of the IEM. CEER agrees that market integration of renewable energy should increase market exposure of renewable energy producers. It has now become evident that non-market-based support schemes must be revised. Moreover, this should include an in-depth analysis of conventional electricity support. There should be a level playing field where both negative and positive externalities are considered. In this regard, we welcome the European Commission's renewed call for a phasing out of subsidies for fossil fuels.

An open discussion should take place considering both negative and positive externalities. For example, if the wider (external) benefits of RES (not just CO₂) were fully reflected (internalised), then public interventions could be minimised. These externalities are part of the rationale for public sector intervention, with Member States developing their renewable policy objectives to minimise negative aspects (e.g. unstable carbon price under the EU ETS, consumer exposure to fossil fuel price risk) and secure positive benefits (such as the future benefits associated with technological development reducing future renewable generation costs, the security of supply benefits of less fossil fuel imports and encouraging wider investment in renewables e.g. from smaller scale participants as well as large utilities).

Under the current conditions of the ETS, where carbon prices have consistently remained low (in part due to the ETS design and the wider effects of the economic downturn), these externalities are poorly addressed. A better designed ETS that will provide the appropriate signals is therefore necessary for the transition to a market-based RES development.

The biennially published CEER Status Review of Renewable Support Schemes in Europe⁴ reveals the current support of RES as the “amount above the market price” and sets out the support schemes used for each technology. In 2011, the highest support levels identified across Member States (for electricity supported) for photovoltaic were as high as 543.43 Euro/MWh. The weighted average over all countries (some of them with very poor sun conditions) reached 350 Euro/MWh. The European Commission's guidance clearly states that the support of inefficient technologies at inefficient sites should be avoided. CEER

³ Cf. p.3 of the Guidance document

⁴ [CEER Status Review of RES support schemes](#), updated June 2013

generally shares this view, as it may result in increased energy prices for customers, but also recognises the need for Member States to pursue a path that leads to a diverse technology mix in various regions in order to handle the challenges of a RES-dominated electricity system. As the European Commission recognises, technology-specific support might still be necessary.

The majority of Member States have some form of feed-in tariff support schemes in place. High feed-in tariffs allow for a “produce and forget” mentality. They were a very effective instrument in the past in order to promote non-mature RES technologies and they delivered a large amount of RES capacity and high volumes of supported electricity. However, as stated in the guidance, in a next phase it is necessary to transform these support schemes for mature RES technologies into more market-based mechanisms or even phase them out. In this context, increased market exposure should include imposing, at least, a balancing responsibility for RES.

As the European Commission’s guidance acknowledges, certain types of RES support can also have damaging effects on the functioning of wholesale markets (for example, fixed payments incentivising generation even when prices are low, leading to negative prices). CEER agrees that in order for public interventions to be minimised and for RES to operate on a level playing field, renewables should be better integrated into the market.

In response to the European Commission’s guidance, CEER suggests that:

- the unstable carbon price is best tackled through reform of the EU ETS (see our response⁵ to the European Commission’s 2030 Green Paper for additional detail), rather than subsidy mechanisms.
- in the absence of EU ETS reform, we share the European Commission’s view that a feed-in (‘floating’) premium helps move RES closer to the market by exposing generators to wholesale price risks whilst avoiding over-compensation when prices are low.
- although technology development can partly be addressed via R&D grants, mass deployment at scale is the key driver of price reductions, so the most appropriate form of public intervention (particularly for RES that operates at low marginal cost) should be carefully analysed, e.g. whether it should lie in subsidising Euro/kW, as opposed to per Euro/kWh.
- the European Commission revisit the question of priority access for renewables. As with fixed feed-in tariffs, this measure has been useful in helping RES emerge and operate in the market, but alternative measures are now more appropriate. All introduction of RES should be market-based or otherwise be supported in a transparent manner via taxes.

We acknowledge, however, that for certain immature but high-potential technologies, a properly designed and closely monitored feed-in support scheme could still be appropriate, so as to help create the critical mass for cost reduction as set out above and ultimately deliver grid parity.

⁵ [CEER Response on 2030 Green Paper](#), June 2013

The guidance does not address best practices for financing RES support schemes; i.e. how the costs for the deployment of renewable generation capacity are socialised among energy consumers. This is an important issue to be analysed further, as such financing issues bear the risk of additional market distortions, for instance where certain consumers (i.e. energy intensive industries) or type of electricity consumption (i.e. “behind the meter”) are partly or fully exempted from the contribution charge (levy, tax, etc.) paid by the remaining consumers to finance the support scheme.

The guidance documents are a first step towards an improved RES support policy. As the European Commission indicates, a necessary next step should involve greater cooperation at EU level regarding common calculation methods, extended use of cooperation mechanisms and an opening of support schemes to production from other Member States (when adequate cooperation mechanisms are in place).

3 Staff Working Document on incorporating demand side flexibility, in particular demand response, in electricity markets

The European Commission's Staff Working Document describes the potential and benefits of demand side flexibility and demand response in electricity markets. It clearly states that while the EU regulatory framework makes demand response possible, it is up to national policy-makers and market participants to make it happen in practice. CEER acknowledges that the areas where demand response can deliver a significant contribution to an efficient electricity market are correctly identified. On a national level, however, the priorities, timelines and market designs differ, which should be recognised.

The Staff Working Document also outlines the advantages of demand side management for residential and industrial consumers. It underlines that the financial effects resulting from such measures are enormous and that total savings may amount to tens of Euro billions per year. Such savings arise from avoided investments to cover peak demand (most likely leading to additional requests for subsidies in favour of conventional power plants), lower transmission and distribution capacity needs and reduced customer bills (although the financial benefits are likely to relate initially to network management). Other positive effects include higher efficiency of the energy system, energy savings and higher capability to accommodate intermittent generation in the market.

Having recognised the benefits of demand side flexibility, one of the key challenges is to identify the appropriate set of approaches towards those electricity consumers that are able and willing to participate in any kind of demand side response programme, and towards those who are not. The latter group must not be unduly disadvantaged and their needs should be taken into account. Demand response schemes must be easy to understand to achieve a broad engagement among households. The 2020 Vision for Europe's energy customers⁶, endorsed by CEER, BEUC and a series of stakeholders, identifies simplicity as key *"in how information is provided to customers, and especially residential consumers, such that it is easy for them to understand their bill and better manage their energy consumption, making the choices that are right for them. It also means simplicity and transparency in how processes that affect customers operate. Many customers, and especially many residential consumers, want to be able to take quick and simple decisions in energy markets."* The aspect of simplicity is also highlighted repeatedly in the THINK report⁷ "Shift not Drift. Towards Active Demand Response and Beyond". Simplicity is crucial in ensuring that demand response becomes a reality.

A highly positive aspect from the Staff Working Document is the explicit reference to balancing markets. Effective and efficient balancing markets are necessary to ensure that there is an equal treatment of demand and generation, that both enter the market under the same conditions and that there are no undue obstacles to an effective and efficient participation of demand side resources – this approach to ensuring economic equivalence between generation and demand is consistent with the goal of achieving cost-effective overall 'system adequacy'.

⁶ [2020 Vision for Energy Customers](#), November 2012

⁷ [THINK Report](#), June 2013

The forthcoming adoption of a European network code on electricity balancing and its subsequent implementation should provide a proper basis for realising this adequacy. At the same time, there are other areas where existing rules need to be assessed in order to identify and remove obstacles (where they exist) to the effective and efficient participation of demand side resources. These include other ancillary services, congestion management, the range of investment risk exposure (faced by generators but less so by demand side providers) and the active participation of all actors (including “behind the meter” generators) in the energy markets.

To enable efficient participation, it is important that companies which provide demand side response are able to achieve a reasonable return on investment.

CEER fully supports the market-based framework set out in the Staff Working Document and agrees that “blanket” price regulation and administrative barriers might under certain conditions act as a key impediment for demand response implementation, starting from time-differentiated prices. In addition to dynamic pricing schemes, it is crucial to ensure that network tariffs are designed in such a way that they do not discourage or even disadvantage demand side resources from actively participating in load shifting activities. Moreover, CEER supports the European Commission in identifying appropriate and standardised functionalities for smart metering systems as a key requirement. It is highly recommended that Member States follow the minimum functionalities set out by the European Commission in its 2012 Recommendation on preparations for the roll-out of smart metering systems.

Smart meter systems should provide meter reading frequently enough (e.g. 15-min-values) to support any kind of demand side management via home appliances. Swift standardisation procedures are also essential to ensure interoperability and appliances that are useable Europe-wide. In this context, it should be further analysed whether the benefits of demand response for households and SMEs will outweigh the costs for a roll out. For the time being, focusing on consumers with high and flexible electricity demand might be a more effective approach.

CEER also considers important the role of aggregators. As stated in the above-mentioned THINK report, intermediaries (e.g. aggregators) are entities that facilitate the demand response transaction between consumers, who thereby provide flexibility. However, the existence of such a range of intermediaries may be inhibited by market power issues, on the one hand, and existing market rules and regulations for the provision of different demand response services, on the other. There is also a need to ensure non-discriminatory access to data for the different intermediaries. For instance, regulation should prohibit the transfer of information from the regulated activity to the deregulated activity, so that an integrated supplier/DSO would not have an information advantage compared to other intermediaries. Any data sharing then requires prior consent by the consumer with the exception of metering data required for regulated activities. In addition to consumer consent, CEER recognises that the exception could also include provisions issued by the competent body.

The Staff Working Document also maps the roles of all involved parties. This raises awareness and calls for further steps towards specific implementation which has to take place at European and national levels. In particular, it is important to explore the relevant role of the end-use customer in the value chain, including domestic and SME consumers. Consumers must be empowered, where possible, and protected by adequate regulation, if needed. CEER also considers that consumers have an important role to play as potential providers and beneficiaries of distributed energy resources and services. In view of the IEM, due attention should be paid to the role of coordination at European level. Wide implementation of demand side management will become one key element when further developing the European electricity target model.